This listing of the claims will replace all prior versions, and listings of claims in the application.

In the Claims

1. (Previously Presented) A system that provides a user of a single analog line multiple uses of said line comprising;

a modem connected to a fixed logic system which multiplexes or demultiplexes data;

said modem compressing a signal traveling through said analog line;
said modem providing simultaneous transmission of two, or more, speech
or data calls.

- 2. (Original) The system of claim 1 wherein said modem is programmable.
- 3. (New) The system of claim 1 wherein said modem incorporates Handel-C.
- 4. (New) The system of claim 1 wherein said system is reprogrammed as needed.
- 5. (New) The system of claim 1 wherein said modem is downloaded on analog lines, cable, satellite and fiber lines.
- 6. (New) The system of claim 1 wherein said simultaneous transmission is accomplished by compressing conventional analog voice traffic to occupy less bandwidth.

- 7. (New) The system of claim 1 further comprising a speech compression algorithm requiring between about 5.6 to 6.4 kbps of bandwidth.
- 8. (New) The system of claim 1 wherein said modem further comprises field programmable gate array chips.
- 9. (New) The system of claim 1 wherein said system is connected to a copper line by a COTS modem.
- 10. (New) The system of claim 1 wherein said system comprises two modems, one at each end of an analog line;
- a first modem compresses and multiplexes data at a source end of said line;

and a second modem demultiplexes and expands data at an exchange end of a copper line.